DOCUMENT RESUME

ED 253 481 SO 016 204

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TITLE An Alternative to the Problematic Macro-Micro Structure of Introductory Economics.
PUB DATE 21 Nov 83
NOTE 33p.; Paper presented at the Annual Conference of the Southern Economic Association (53rd, Washington, DC, November 21, 1983). Exhibit 3 contains small print.
PUB TYPE Reports - Descriptive (141) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Course Descriptions; *Course Organization; *Economics Education; Higher Education; Teaching Methods; Undergraduate Study
IDENTIFIERS *Macroeconomics; *Microeconomics

ABSTRACT

The paper explains an alternative structure to teaching micro and macroeconomic theory and describes the characteristics that make it an effective framework for introductory and principles courses. The teaching of economics principles typically proceeds by separating macroeconomic theory and microeconomic theory. But the use of the macro-micro division in introductory economics courses and textbooks is becoming increasingly difficult to defend in light of the growing awareness of the numerous interdependencies between the two. Moreover, the division of the topics into macro and micro components is incomplete in that it does not structure adequately several sets of important subjects which do not fit neatly into the micro-macro structure. Fortunately, there is available an alternative organizational structure which is not tied to the distinction between macro and micro and which enables economics educators to provide a comprehensive and complete view of reality from the perspective of economics. The suggested structure emerges from the economist's recognition of scarcity as a universal phenomenon. The study of economics may be organized, therefore, by an exposition of the various ways of coping with scarcity that are available to both societies and individuals. Five illustrative charts and a course outline are included. (Author/LH)

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AN ALTERNATIVE TO THE PROBLEMATIC MACRO-MICRO STRUCTURE OF INTRODUCTORY ECONOMICS

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SP 016 204

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THIS PAPER WAS PREPARED FOR PRESENTATION AT THE 53RD ANNUAL CONFERENCE OF THE SOUTHERN ECONOMIC ASSOCIATION, NOVEMBER 21, 1983, WASHINGTON, D.C.

AN ALTERNATIVE TO THE PROBLEMATIC MACRO-MICRO STRUCTURE OF INTRODUCTORY ECONOMICS

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Abstract

The teaching of economics principles typically proceeds by separating macroeconomic theory and microeconomic theory (hereinafter referred to as macroeconomics or macro, and microeconomics or micro, respectively). But the use of the macro-micro division in our courses and textbooks is becoming increasingly difficult to defend in light of the growing awareness of the numerous interdependencies between the two. Moreover, the division of topics into macro and micro components is incomplete in that it does not structure adequately several sets of important subjects which do not fit neatly into the micro-macro structure.

Fortunately, there is available an alternative organizational structure which is not tied to the distinction between macro and micro and which enables economics educators to provide a comprehensive and complete view of reality from the perspective of economics. The suggested structure emerges from the economist's recognition of scarcity as a universal phenomenon. The study of economics may be organized, therefore, by an exposition of the various ways of coping with scarcity which are available to both societies and individuals. This paper explains the alternative structure and describes the characteristics that make it an effective framework for introductory and principles courses.

AN ALTERNATIVE TO THE PROBLEMATIC MACRO-MICRO DIVISION OF INTRODUCTORY ECONOMICS

I. Introduction

> The separation of topics into macroeconomics and microeconomics, which has facilitated teaching, is becoming strained. ... More and more, macroeconomic problems seem to stem, at least in part, from microeconomic causes. (Carroll, Microeconomic Theory, p. 21.)

This quotation echoes the sentiments of an increasing number of economists who feel a growing dissatisfaction with the state of our presentation of the principles of economics in university and college courses in the United States. Moreover, it is not evident that the theoretical division actually has "facilitated teaching" as is widely believed. Certainly no empirical test of the superiority of the macro-micro structure over alternative structures has ever been made. In part, this is so because no well-developed alternative formats for structuring the material typically treated in the principles course have been available. Hence, how could there have been a valid comparison? As a paradigm for presenting the body of economic theory, the macro-micro division has reigned supreme for several decades.

Bu, even if other structural organizations had been available, upon what basis would one have compared their relative effectiveness? Would it have been a comparison of the gap-closing differentials on pre- and post-tests utilizing the Test for Understanding of College Economics or some other standardized measurement instrument? A major problem with this sort of analysis is that the testing instruments themselves implicitly reflect the paradigmatic view of macro vs. micro. It is likely that the results would indicate that the macro-micro structure is "superior" to the other structure(s). But the "effectiveness" of the method of organizing the principles of economics is not captured completely in tests of content mastery.

Student understanding of particular concepts and theories (the trees in the proverbial forest, if you will) is not the key considerati[illegible] differentiating one structural

organization from another. This is not to say that content mastery could not be enhanced by adopting a different organizational structure. Surely, a more meaningful setting in which individual facts and concepts are presented could assist students in understanding better and retaining for a longer period, individual facts and concepts. An organizational structure that illuminates the reasons for studying particular topics, and which clearly delineates the interrelationships among those topics, could conceivably improve content mastery.

But content mastery is not the fundamental argument for an alternative structure. Rather the distinction is more subtle. In the words of Leftwich: "The principles course must provide a simplified, relatively complete, and usable picture of the economic system and how it operates." (p. 27) Thus, an effective organizational structure would enable students to perceive and understand clearly the nature of the forest as well as the individual trees. An effective structure would reveal the linkages and interrelationships among major topics, theories, and problems treated by economic analysis. Rather than emphasizing subdivisions of economic theory, an effective organizational structure would provide students with a unified, integrated world view, a perspective which would enable them to appraise the essential economic nature of any newly-encountered problem. Students would be introduced to economic theory within a comprehensive view of how the application of economics contributes towards solving human problems. The effect would be that, upon encountering a new subject, students would be able to say: "This issue is essentially one of economic growth (or allocative efficiency, or equity, for example), and concepts such as investment and saving (or, for example, comparative advantage or competition) are relevant to successful analysis of it."

Prior to presenting my proposed alternative organizational structure, however, it is important to understand the problems endemic to the mainstream macro-micro division which currently dominates introductory and principles courses.

II. Problems with the Macro-Micro Division

Consider some typical college course catalog title listings of the two-term principles course: Economics 201 & 202; Principles of Economics I & II; Macroeconomic Principles and Microeconomic Principles; Introductory Macroeconomics and Introductory Microeconomics; Principles of Economics I -Macroeconomic Theory & Principles of Economics II - Microeconomic Theory. Next, consider that most of the "big" principles textbooks are also made available in paperback splits titled macroeconomics and microeconomics. Finally, consider that the catalog descriptions of even many one-term introductory courses include references to macroeconomic topics and microeconomic topics. After due consideration, one is led to the conclusion that economics must be divided into two major sub-fields. As a matter of fact, at course enrollment time, students at many institutions are told that it doesn't matter which of the two is taken first. The message is that the gap between the two is so complete that they are, in effect, separate subject areas.

Thus, the methodological distinction between macro and micro which emerged from the Keynesian critique of neoclassical theory[1] has become transformed ever so gradually into a hard-and-fast way of structuring students' thinking about economics. We have institutionalized the dichotomy in our textooks and university courses. To paraphrase McLuhan, the superstructure has become the message.

Adoption of the macro-micro framework in the beginning course actually was slow in coming. Keynes' General Theory only gradually led to the realization that there is an important difference between analysis of individual market behavior and that of the economy in the aggregate. For example, Bowman and Bach's popular Economic Analysis and Public Policy (Second Ed., 1949) contained eight parts: Laying the Foundations; The Level of Total Income, Employment, and Prices; Production, Individual Prices, and the

[1]Actually, Keynes did not originate the terms "macro" and "micro." In a brilliant essay, Machlup points out that Ragnar Frisch was probably the one who introduced them into economics in the early 1930s.

Allocation of Resources; The Distribution of Income; The Government, Business, Agriculture, and Labor; The Public Economy; Public Policy and Economic Stabilization; and The International Economy. There was yet no clearly delineated macro-micro separation. Other books published in the late 1940s (such as those by Arthur E. Burns; Lewis A. Froman; Dodd and Hasek; and Shorey Peterson) presented major topics in a similar, serial fashion. By 1955, Samuelson's third edition contained six sections: Basic Economic Concepts and National Income; Determination of National Income and Its Fluctuations; The Composition and Pricing of National Output; Distribution of Income: The Pricing of the Productive Factors; International Trade and Finance; and Current Economic Problems. Here we see that macro was placed before micro topics, with international economics and current problems picking up the remainder.

Historical developments in the United States and Western Europe also played a dominant role in shifting the focus of economists. These shifting interest ultimately are reflected in topical coverage and placement in our textbooks. The Great Depression caused most of the profession to set aside price theory and take up the question of underemployment. The postwar years brought with them a growing interest in economic growth theory which was largely macro in orientation. (Machlup, pp. 136-138). Hence we observed the corresponding expansion of macro topics in economics textbooks. By the early 1960s, the macro-micro separation had become a clear and dominant framework for presenting economics. It seemed as if the new breed of macro-economists were saying "Move over, price theory, and make room for important macroeconomics." The consequences of this tidy division, unfortunately, are becoming increasingly evident to many in the profession. Most of us have felt a certain awkwardness in attempting to explain to our students the connections between macro and micro. Are they related to each other? If so, in what concrete ways? And why are they not taught in an integrated framework? Henderson and Quandt state, for example, that since "the problems of individual price determination are assumed away in macro theory, the relationship between

individual units and aggregates is not clear." (p. 3.) Students may also ask: Is macro or micro more important? And are some topics amenable to analysis by both macro and micro perspectives? If not, why not? Are all aspects of economics subsumed under the macro-micro categorization? And, as Shubik has asked, "at what level does a microeconomic model become a macroeconomic model, or vice versa?" (p. 408).

In recent years, several important and distinct theoretical developments have had the cumulative effect of undermining the neat and clean dichotomy between macro and micro. The distinction is becoming more and more difficult to defend as a result of two developments: (1) studies of the microfoundations of macroeconomic theory such as the research on incentives affecting labor market participants and government transfer recipients, and (2) recognition of the limitations of modeling the national economy as a closed system, combined with the development of rational expectations theory.

To complicate matters further, the sequential presentation of topics in the beginning course is itself a source of further confusion. My examination of thirty-nine principles and introductory textbooks, including most of the best sellers in both the two-term and one-term markets, revealed that few texts make use of a simple macro-micro categorization. Setting aside the fact that a distinct minority place micro before macro, the topical organization within these texts may be grouped into several major types. As shown in Exhibit 1, the most predominant format is the sequencing of macro, micro, distribution, and growth/international. One close variation leaves out distribution as a separate section while another excludes growth. A smaller number of the textbooks treats distribution, public policy, and international as separate topical divisions in addition to macro and micro. The well-known text by Lipsey and Steiner is of interest here in light of their restructuring of the sixth edition (1981). What had been nine separate topical divisions were transformed into three: the usual introductory section followed by micro and then macro. This is the only example of a straightforward macro-micro organization used in a two-term textbook.

EXHIBIT I

TOPICAL SUBDIVISIONS FOUND IN PRINCIPLES/INTRODUCTORY ECONOMICS TEXTBOOKS

(n=39)

TYPE A (16 texts)

Introduction
Macroeconomics
Microeconomics
Income Distribution
Growth & World Economy

TYPE B (9 texts)

Introduction
Microeconomics
Macroeconomics
International Economics

TYPE C (4 texts)

Introduction
Macroeconomics
Growth
Microeconomics
Income Distribution
Public Policy
International Economics

TYPE D (3 texts)

Introduction
Macroeconomics
International Economics
Microeconomics
Income Distribution

Miscellaneous (7 texts)

Note 1: A detailed listing of all textbooks examined in preparing this Exhibit is available upon request from the author.

Note 2: In the process of categorizing textbooks into "types," I adopted the technique of grouping several sections under a single heading whenever those sections addressed a single major topic. For example, I categorized into a single Macroeconomics section several sequenced subdivisions having titles such as Keynesian Analysis, Monetary Policy, Inflation and Unemployment.

But do macro and micro encompass the whole of economics? Most textbook authors appear to be saying that they do not. For example, while income distribution is often addressed within the micro section of introductory texts, it is just as often presented in a separate section. Another topical area which causes placement difficulty for authors is economic growth. Many treat it as a macro topic, but more often than not growth is developed in a separate section. The same kind of trouble exists with respect to international economics. Students might legitimately ask: Is there one economics or are there several separate "economics-es"?

Thus, what we observe on the one hand is the institutionalization of the macro-micro distinction and, on the other, a variety of actual topical presentation formats in our textbooks and, presumably, our courses.[1] To be sure, the variations still hinge around the macro-micro division. But the differing views on topical organization are real. Economics educators, in effect, talk the macro-micro game but are confused and less than confident in its adequacy for organizing economics as a coherent body of knowledge.

The underlying reason for these difficulties is that an important but by no means all-encompassing analytical distinction, that between partial and aggregate equilibrium analysis, has been elevated to the primary distinction in the discipline, dominating all others. While the issue of aggregation (and the related fallacy of composition) is an invaluable distinction in its own right, it is, unfortunately, not a comprehensive one. This is why economists have trouble placing into the framework important topics such as income distribution, growth, and international economics. What we do when we use the macro-micro dichotomy is shift the focus of the study of economics from its concern for

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[1]Dennis E. Logue, who reviewed an earlier and substantially different version of this paper, said it is not legitimate to criticize the principles course on the basis of what is found in principles textbooks. Obviously, course organizations do not follow necessarily textbook organizations. Nevertheless, given the multitude of introductory and principles texts in the market, and the broad similarities among them, it would be surprising indeed if it were found that the organizational structures of beginning courses differ significantly from the basic types found in the best-selling textbooks.

real-world problems to a focus on economics as an analytical science. Now, most of us would agree that the teaching of analytical skills is one of the most important objectives of the basic course. But it should not sweep away the primary purpose which, in the long tradition of the profession, has always been to study and understand economic behavior in order to "produce more beneficient solutions to the economic problems of actual societies." (Solo, p. 12.)

It is as if a course in Introductory Physics were to focus student's attention on the nature of the science of physics, its theories, laws, and observations in various domains, rather than on the nature of the physical world which that science helps us understand! Hurst, Lesage and Weiss have argued that the content

> in most introductory economics courses is mainly theoretical, and introductory economic theory does not emphasize the goals of an economic system, establishment of which are sic a prerequisite to problem solving. (p. 56)

Then they go on to say that economic theory as it is presented today does not integrate the concepts into a complete and functional framework. We seem to have gotten bogged down in examining separate theoretical trees and have forgotten that a comprehensive view of the forest and its major functions is essential.

But there is an alternative to the macro-micro partition. In the next section, I explain that alternative in the hopes of persuading others that a new structural paradigm is available and is more effective. Prior to that, however, let me not be misunderstood regarding my objections to the macro-micro distinction. I am not arguing that the distinction is invalid as an important analytical device. In an essay titled "Justification of macroeconomics," Boulding explains that "we must generalize and aggregate if we are to get any idea of what the system is like and how it functions as a whole." (p. 172) But, what is crucial analytically is that

> the character and behavior of aggregates or populations of things cannot be obtained simply by generalizing from the character and behavior of the individual components. The forest as an object of study, even though it is merely an aggregation of trees, does not exhibit the characteristics and behavior of individual trees." (pp. 172-173)

My argument with the separation between macro and micro, therefore, stems not from any claim questioning its validity as an analytical distinction but, rather, because of its almost complete domination of the presentation of the entire body of economic knowledge. In teaching economics, we must place the distinction into proper perspective. I believe my proposed alternative structure achieves the desired balance.

III. An Alternative Organizational Structure

To understand better the alternative structure, it is useful first to consider how present courses and texts, which almost universally begin with a discussion of scarcity, arrive at the macro-micro division. Some initially talk about the need for society to make choices and then jump to a listing of the goals of society. However, it is not clear how macro and micro follow unless there is the intention to categorize these goals into macro-goals and micro-goals. Certainly that intention is rarely expressed explicitly. The more typical sequencing consists of a straightforward jump into either macro or micro with no pretense of making connections or justifying the order of treatment. The introductory discussion, moreover, provides a shopping list of supposedly important topics such as the goals of society, macro-and-micro economics, the four (or five) important questions which every economic system must answer, normative vs. positive economics, and so forth.

That the structural organization of introductory economics poses a problem for the profession is underscored by the attempt of Hansen, Bach, Calderwood & Saunders to develop a unified framework in their Master Curriculum Guide in Economics for the Nation's Schools: Part I -- A Framework for Teaching Economics: Basic Concepts. Without doubt the two Guide volumes fill a huge gap in assisting teachers at various grade levels to present economics in a comprehensive and functional way. The two-part document is indeed a "crowning achievement," as stated in the book's Preface by the President of the Joint Council. Nevertheless, their schematic framework leaves much to be desired as an integrated organizational structure of economics. Exhibit 2 reproduces their Figure 2 which is presented as a comprehensive schematic framework of economics. Note that

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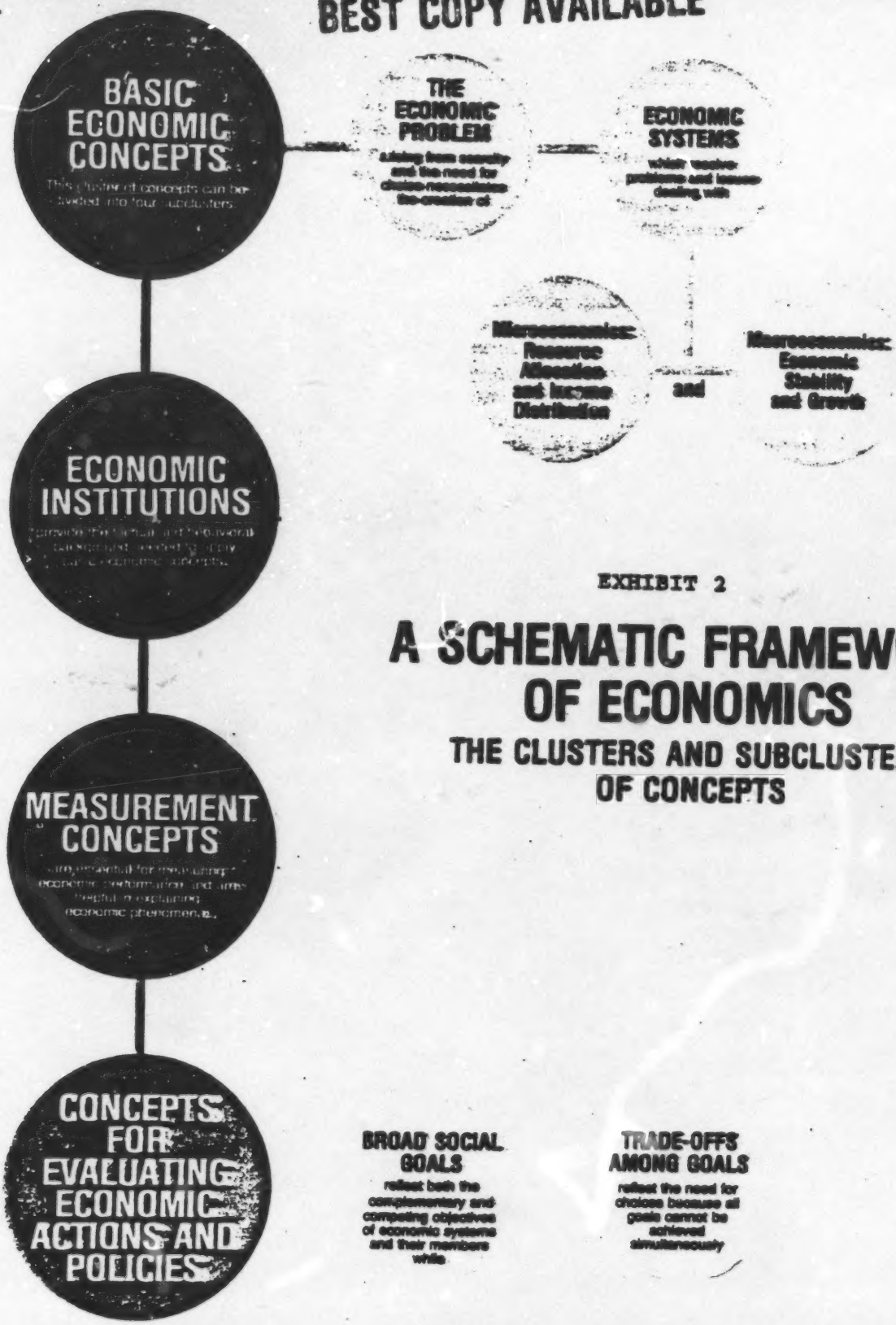
BASIC ECONOMIC CONCEPTS
This cluster of concepts can be divided into four subclusters.
THE ECONOMIC PROBLEM
Arising from scarcity and the need for choice necessitates the creation of
ECONOMIC SYSTEMS
which resolve problems and issues dealing with
Macroeconomics: Resource Allocation and Income Distribution
and
Macroeconomics: Economic Stability and Growth
ECONOMIC INSTITUTIONS
MEASUREMENT CONCEPTS
CONCEPTS FOR EVALUATING ECONOMIC ACTIONS AND POLICIES
BROAD SOCIAL GOALS
reflect both the complementary and competing objectives of economic systems and their members while
TRADE-OFFS AMONG GOALS
reflect the need for choices because all goals cannot be achieved simultaneously

EXHIBIT 2

A SCHEMATIC FRAMEWORK OF ECONOMICS

THE CLUSTERS AND SUBCLUSTERS OF CONCEPTS

SOURCE: Hansen, Bach, Calderwood & Saunders, Master Curriculum Guide, Figure 2.

macro and micro are classified as topics which "problems and issues deal with." However, in their listing of concepts on the subsequent page, the authors identify separately micro, macro, and "the world economy."

To further confuse the issue, their Figure 5, which is reproduced as Exhibit 3 here, attempts to link the concepts. In this case, the terms macro and micro have disappeared. We now are provided the important questions which every economic system must answer which, in turn, lead to five categories of concepts: economic wants, productive resources, aggregate supply and productive capacity, economic growth, and income distribution and government redistribution. Interestingly enough, the question of stability (or the maintenance of a full employment rate of output) is not found among their list of important questions. However, in Knight's original version, the "fundamental questions" framework did include stabilization. Having defined economics as dealing with "the social organization of economic activity," Knight went on to explain that social organization is "a problem of the social machinery for accomplishing five fairly distinct functions." (p. 7) It is clear from his discussion that he intended that these functions be used "as an aid to discussing the existing economic order both descriptively and critically, its structure as well as its workings." (p. 8) For purposes of organizing the study of economics, however, this potentially useful categorization is generally not used to unify the various elements of the beginning course. Rather, it is usually treated briefly at the beginning of the course and then, almost literally, dropped and forgotten. My framework, explained next, incorporates these fundamental questions in a way that shows explicitly how they relate to one another.

The proposed alternative follows a simple internal logic, presented in Exhibit 4. It begins, as do most introductions to economics, with the problem of scarcity. But instead of adding several layers of "goals," "important questions" and "social issues," the structure instead pursues the problem by presenting economics as the study of the ways in which society may cope with scarcity. This is not an entirely new notion. In

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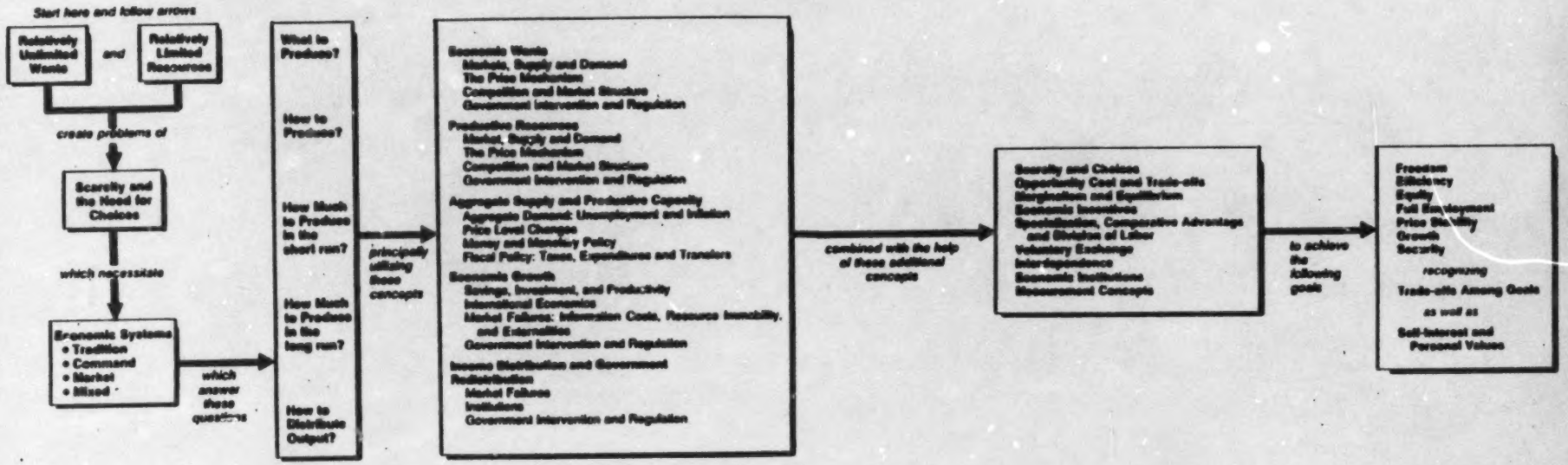
EXHIBIT 3

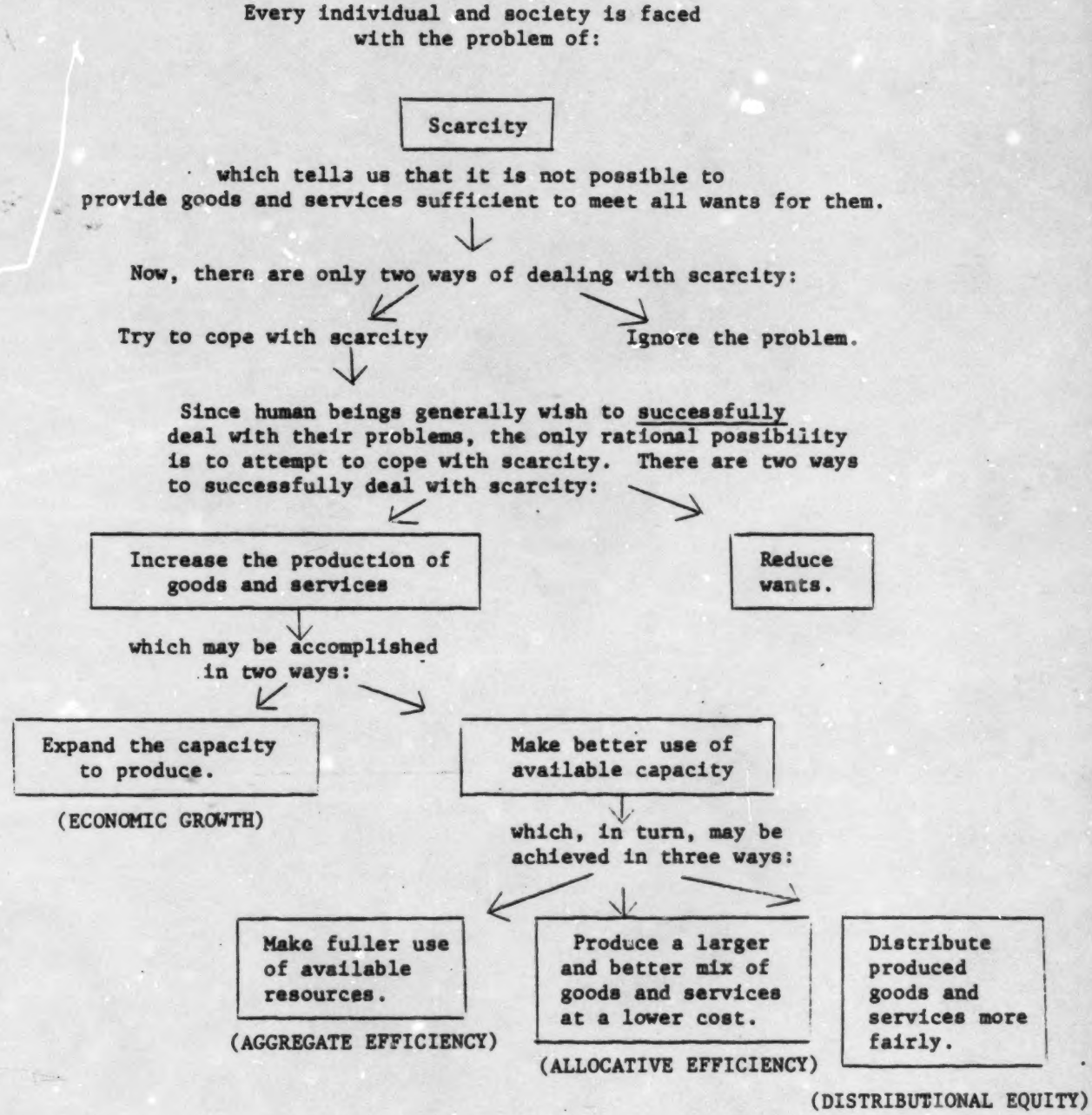
A SCHEMATIC FRAMEWORK OF ECONOMICS
AN APPROACH TO LINKING THE CONCEPTS



SOURCE: Ibid., Figure 5.

EXHIBIT 4

THE INTERNAL LOGIC OF THE
ALTERNATIVE ORGANIZATIONAL STRUCTURE


Every individual and society is faced with the problem of:
Scarcity
which tells us that it is not possible to provide goods and services sufficient to meet all wants for them.
Now, there are only two ways of dealing with scarcity:
Try to cope with scarcity
Ignore the problem.
Since human beings generally wish to successfully deal with their problems, the only rational possibility is to attempt to cope with scarcity. There are two ways to successfully deal with scarcity:
Increase the production of goods and services
Reduce wants.
which may be accomplished in two ways:
Expand the capacity to produce.
(ECONOMIC GROWTH)
Make better use of available capacity
which, in turn, may be achieved in three ways:
Make fuller use of available resources.
(AGGREGATE EFFICIENCY)
Produce a larger and better mix of goods and services at a lower cost.
(ALLOCATIVE EFFICIENCY)
Distribute produced goods and services more fairly.
(DISTRIBUTIONAL EQUITY)

1950, Daugherty stated that an introductory economics course containing an integrated frame of reference might be designed as follows: "The central, unifying theme could well be the theory of rational choice among the alternatives facing the human animal in his effort to satisfy his basic urges." (p. 225) In other words: the ways human beings can cope with scarcity. The two fundamental options are to find ways of increasing output or to reduce wants. Economics traditionally ignores the latter, although a small portion of any introductory course could be used to explore that alternative. The option of increasing output may be further subdivided into two possibilities: expand the capacity to produce, and make better use of existing capacity. It is interesting to note in this context that the curriculum structure developed by Senesh talks about man's responses to scarcity only in terms of making better use of resources: "man has tried to develop methods to produce more in less time, or more with less material and in shorter time." (p. 24) In my structural organization, expanding the capacity to produce, which occurs by improving the quantity and quality of productive resources, is given a prominent position. The reasons for this are presented in a subsequent discussion below.

Finally, under the general heading, making better use of available capacity, three subdivisions are possible. One of these is to make fuller use of available resources, while a second is to produce a larger and more appropriate mix of goods and services at a lower cost. Of course, both of these refer to types of efficiency. The third subdivision concerns improvements in distributional equity which I categorize as another way of making better use of existing resources. The boxed phrases in Exhibit 4 identify the major topics developed within this framework. Terms in parentheses give the economist's terminology for the phrases within the boxes. Several important aspects of this organizational structure should be noted:

1) The scheme is comprehensive. These are the <u>only</u> ways of dealing with scarcity.

2) All important concepts and analytical tools, traditionally taught in the

macro-micro format, may readily be presented within this framework. For example, in my one-term course, I develop specialization and exchange, market relationships, elasticity, the shortcomings of the market system, and the allocative efficiency role of government when I introduce students to the second way of making better use of available capacity (the boxed section labelled allocative efficiency).

3) Instructors logically may treat, if they wish, the alternative of reducing wants within the introductory course. In my course, I explain this way of dealing with scarcity by discussing Buddhist economics, the possibility of dropping out of the system, Thoreau's economic philosophy, and the like. I also point out how unpopular this approach to scarcity is -- with good reason -- and explore the difficulties associated with attempts to carry out this strategy.

4) The discussion and development of economic theories and analytical techniques are all grounded in a concern for the real-world problem of dealing with scarcity. This approach comes very close to meeting the ideal of a holistic and functional framework described by Hurst, Lesage and Weiss wherein "various economic concepts and methods we presently teach about would be organized according to the economic goals they address." (p. 58) For example, Keynesian, supply-side, and monetarist economics are introduced and discussed when students arrive at the first way of making better use of available capacity, namely, improving aggregate efficiency.

5) Students are shown that the study of economics is holistic and integrated. They learn that policies to achieve one objective may sometimes reinforce and sometimes conflict with the achievement of other objectives. This is especially evident when students explore distributional equity as a way of making better use of available capacity. No topics are introduced in a shopping-list fashion. For example, specialization and trade are fully discussed under allocative efficiency, where they belong conceptually.

6) An added benefit of using this structural organization is that students learn the meaning of terms such as aggregate efficiency and distributional equity instead of

imprecisely broad constructs like macro and microeconomics.

In practice, my students are provided a simplified itemization of the material in Exhibit 4. The actual sequencing of major topics in my one-term course is given in Exhibit 5, panel (a). Panel (b) is intended to clearly show students the interrelationships among the major topics treated in the course. One differentiating characteristic of the framework is that economic growth is introduced early in the course. There are three reasons for this untypical sequencing: (a) given its importance as the primary means of raising living standards in many nations during the past two hundred years, economic growth should be given greater emphasis than at present; (b) it provides a logical setting for introducing the important concepts of saving and investment, which are explained in terms of society's temporal opportunity costs and benefits; and (c) it allows instructors to introduce in a logical and integrated way the current problems associated with economic development policies of the relatively poor nations. In this way (and others) the introductory course may be internationalized without resort to ad hoc additions of topical sections labelled "the world economy" and the like.

Another important characteristic of the alternative structure is that it clearly presents aggregate efficiency and allocative efficiency as different yet complementary ways of dealing with scarcity. Of course, students come to learn that some policies aimed at improving aggregate efficiency may not necessarily improve allocative efficiency. But the structure shows how the two objectives are related to the broader goal of making better use of available capacity. Thus, even as students learn that aggregative thinking is different from partial equilibrium analytics, they see that the two modes of analysis complement one another. The analytical separation between the two is not the governing framework. Rather, the analytics are developed in the service of understanding the various ways in which we may fruitfully make better use of resources. My structure provides a real-world setting for developing aggregative and allocative theories.

Since the alternative framework begins with a discussion of the necessity of

EXHIBIT 5

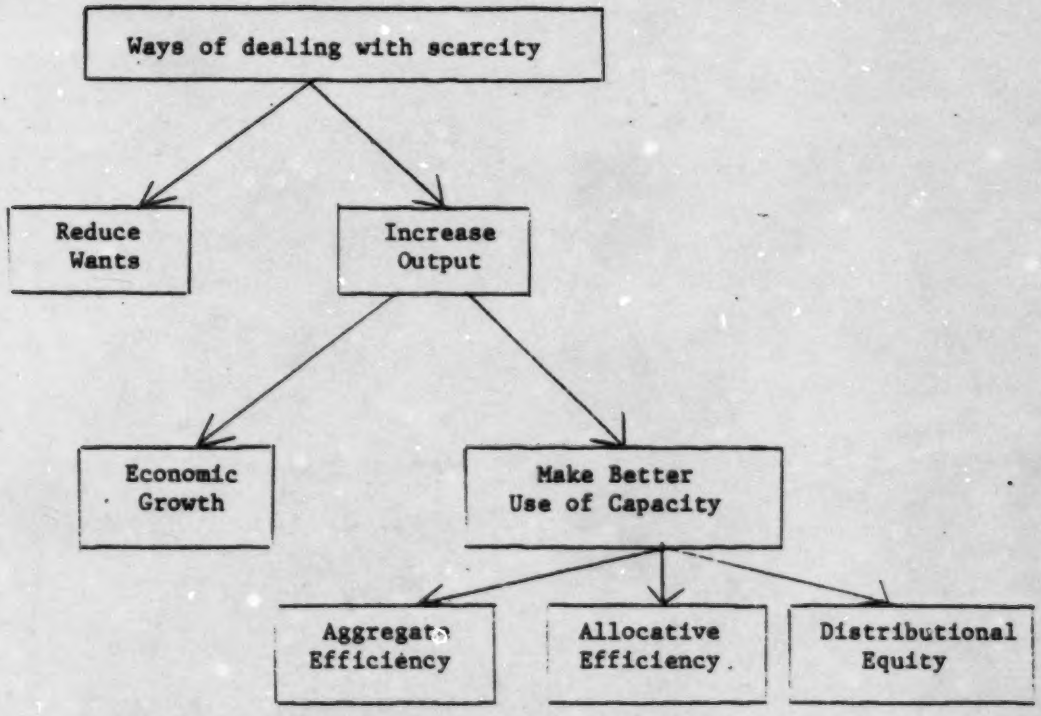
TOPICAL SEQUENCE WITHIN THE
ALTERNATIVE ORGANIZATIONAL STRUCTURE

(a)

Economics is the study of the methods for coping with scarcity:

1. Increase Output
   - A. Economic Growth
   - B. Better Use of Capacity
     - a. Aggregate Efficiency
     - b. Allocative Efficiency
     - c. Distributional Equity
2. Reduce Wants

(b)



increasing output to cope with scarcity, it follows naturally that output measurement be introduced at the outset. Hence, my organizational structure presents GNP and GNP per capita early in the course. Students are shown that discussion of most major topics can be enhanced by reference to the GNP concept. In this way, GNP does not get pigeonholed as a "macro" topic as it does, unfortunately, at present. Similarly, the concept of money is not left for a separate macro section on money and banking. Rather, the roles of money in helping society improve economic growth, allocative efficiency, and aggregate efficiency serve as another means of integrating course material.

IV. Problems With and Objections to the Alternative Structure

Lest the reader think that the alternative organizational structure is simply a re-labelling and re-shuffling of topics already treated in the beginning course, let me state, once again, that the major advantage of my framework is that it brings to the study of economics a cohesive view. All topics flow naturally from the focus upon ways of dealing with scarcity. Interrelationships among these various ways as well as among policy prescriptions to achieve them are clearly delineated. The standard course, which is designed to teach economic concepts and principles, illustrates the theory by reference to real world problems. In contrast, the focus of the suggested alternative is on the problems engendered by scarcity that are faced by individuals and societies and the ways in which economics can help us understand and deal with those problems.

Nor should the alternative structure be viewed as simply another innovative "strategy" for teaching the introductory course. One of the numerous services provided by the Joint Council on Economic Education has been to provide economics educators with alternative approaches to the college introductory economics course. These have come in the form of special issues of the Journal of Economic Education and include the Leftwich-Sharp "issues approach," Fels' problem-solving methodology, and experimental courses by the Tuckmans and by Saunders. All but the issues approach explicitly work within the macro-micro framework. Leftwich and Sharp categorize their presentation of issues into

Resource Allocation, Stabilization, and Income Distribution. While enormously useful as a technique for motivating students to learn concepts and principles, their issues approach suffers from the complete absence of any unifying structure. It seems to me that the issues method of teaching economic concepts and methods of analysis could be retained within the alternative structure. What would be required is a re-sequencing of the issues the authors wish students to analyze, with periodic reference to the overall unifying framework.

On another level, Fels has indicated to me that his problem-solving methodology, based primarily on supply and demand, is sufficient for unifying the presentation of economics. It cannot be denied that supply/demand analysis is both necessary and enormously helpful for the understanding of economics. I make extensive use of supply and demand analysis not only in the allocative efficiency part of my one-term course but also in the aggregate efficiency section, by means of aggregate demand-supply analysis. But it is simply not comprehensive enough to provide an overall conceptual framework for the entire body of economic knowledge. Supply and demand models are forms of "systematic local explanation," one step below a conceptual framework which, according to Warren, Allen and Haefner, is an "overall conceptualization of a domain." (p. 297)

A practical obstacle to making use of the alternative organizational structure is the discrepancy between its sequencing of topics and the sequence found in most textbooks presently on the market. Obviously, the marginal cost of adopting the new framework is significant. For several years I found myself switching from one text to the next in search of topical coverage adequate for my needs. Gradually I began to write my own materials. For example, I developed a lengthy discussion of the fundamentals of economic growth which students were required to read early in the course. I also prepared materials describing the GNP and its connection to measuring the standard of living. (My prepared handouts are currently available to interested instructors upon request.) These and other materials have been developed into my own textbook which will be available

late in 1984. The text, once published, will serve to reduce the marginal cost associated with adoption of the new framework. In the meantime, the attached Appendix provides readers with a course outline itemizing the topics covered in my one-term course.

Another cost associated with the adoption of the alternative framework is that of making institutional change in the two-semester Principles sequence. My preference would be to cover economic growth and allocative efficiency in the first semester. The broad subject area of allocative efficiency would include discussion of market structures, government policy with respect to allocative efficiency, and the efficiency benefits associated with international trade with an accompanying discussion of international finance. The second semester would then be devoted to aggregate efficiency and distributional equity topics. Time permitting, a brief analysis could be made of the "unpopular" way of dealing with scarcity, i.e., reducing wants. Textbooks currently available could be examined with the aim of finding the closest match in topical coverage to the alternative framework. But, regardless of the text chosen, students very likely would be required to "jump around" in the text, a rather bothersome prospect, at best.

Tied to the textbook problem is that of re-writing course descriptions for the two-semester sequence. Admittedly, the macro-micro division has provided a degree of flexibility by enabling departments to assign different instructors in each of the two semesters. In practice, the two semesters of what is supposed to be a year-long principles course have been treated as separate and distinct courses. Paperback splits of the big books have further enabled departments to use different books in each semester. In contrast, my framework argues strongly for a unified, cohensive course. Hence, a neat division into two parts is neither easy nor desirable. The ideal situation would be to use a single set of text and supplementary materials, and possibly even the same instructor, for the entire year. The course description of such a course might read something like the following:

EC 101-102 PRINCIPLES OF ECONOMICS (6 credits).

A comprehensive introduction to the fundamental concepts and principles of economics. The course examines the various ways available to both individuals and societies for dealing with the universal phenomenon of scarcity. Major topics covered include: measurement of the output of goods and services; economic growth as a means of expanding the capacity to produce; aggregate efficiency; allocative efficiency; distributional equity; and the possibility of reducing wants.

However, given the widespread acceptance and institutionalization of the macro-micro paradigm, a change in organizational structure will only occur when a sufficiently large number of instructors becomes disenchanted with the current structure and becomes more receptive to an alternative. At present there continues to be a great need for economics educators to develop unified instructional designs for the basic course. The integrated framework presented here demonstrates that it is possible to make intelligible the complex economic realities which we face by placing them within a cohesive, unifying perspective based on society's responses to scarcity. Economic theory thereby acquires greater meaningfulness when it is introduced to students within this integrated structure.

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APPENDIX

INTRODUCTION TO ECONOMICS (Dr. Tinari)

COURSE OUTLINE

Welcome to the World of Economics

- The Scope of Economics
- A Way of Thinking
  - Cost; Marginal Analysis; Warnings Regarding the Uses of Marginal Analysis
- Scarcity
  - Resources; Poverty in an Absolute Sense; The "Standard of Living"; Poverty in a Relative Sense
- Dealing With Scarcity: Three Options
  - Growth: Expanding Society's Capacity to Produce
  - The Second Option: Improving Resource Usage
  - The Passive Option: Reducing Expectations

PART A: THE FIRST OPTION: EXPANDING SOCIETY'S CAPACITY TO PRODUCE

Measuring Growth

- Definition
- The Gross National Product
- The Causes of Economic Growth
  - Investment in Human Resources
    - Labor Force; Labor Force Expansion; Productivity; Human Resource Quality Improvement; Encouraging the Entrepreneur
  - Investment in Natural Resources
    - Increasing the Quantity of Natural Resources
    - Increasing the Quality of Natural Resources
  - Capital Investment

Growth Policies

- Substitution Among Resources
- Problems Associated With Economic Growth
- Why Doesn't Growth Occur?

PART B: ALLOCATIVE EFFICIENCY: THE SUCCESS AND FAILURE OF MARKETS

What is Allocative Efficiency?

- Producing the Correct Mixture of Goods and Services
- Some Fundamental Allocation Choices
- Indicators of Allocative Inefficiency
- Maximizing Production
- Combining the Two Components: Taking Advantage of Resource Productivities
- Costs of Specialization and Exchange
- As Changes Occur
- The Allocative Efficiency Role of Money

The Idea of a Market Economy

- Three Systems of Organizing Society
- Markets Depend On...
- Buyers, Sellers, and Competition
- Business Firms and Profits
- Restricting the Scope of Markets

How Markets Tend to Work

- Buyers, Buyers Everywhere
- The Sellers' View
- Demand and Supply
- Market Reactions to Changing Conditions
- Important Aspects of Supply-Demand Analysis
- Elasticity: How Responsive Are Buyers and Sellers?
  - Determinants of the Price Elasticity of Demand
  - Determinants of the Price Elasticity of Supply
  - Measuring Elasticity
  - Some Friendly Advice Regarding Elasticity Measurements
  - Elasticity Applications

Market Applications and Implications

- Connections Among Markets
- Market Price: The Connecting Link
  - Price As Incentive
  - Price As A Rationing Device
- What If We Wanted To Ration Goods Without Using Prices?
- The Story Behind Price Controls
- Guaranteed Prices: Nice If You Can Get 'Em
- Got a Problem? Subsidize or Tax It!
  - Subsidies
  - Commodity Taxes
- Tax Incidence
- Consumer Boycotts
- Allocative Efficiency Through Markets
  - The Role of Relative Prices

Shortcomings of the Market Economy

- Competition May Not Prevail
- Sellers Have An Interest in Trying to Reduce the Pressures of Competition
- Barriers may Prevent the Development or Continuation of Competition
  - Circumstantial Barriers
  - Institutional Barriers
  - Economic Barriers
- Costs and Benefits are not Completely Accounted for in Market Transactions
  - External Costs
  - Common Property
  - External Benefits
- The Distributional Outcome of the Market Economy may not be Socially Acceptable
- Some Debatable Criticisms
  1. The Market Economy Tends to Generate Inadequate Growth
  2. Consumer Ignorance Makes Markets Work Inefficiently
  3. Market Results are Inhumane
  4. Consumer Wants are Created and Manipulated
  5. The Market Economy Encourages Undesirable Values
- Erroneous Criticisms of the Market

Allocative Efficiency: What Can Society Do?

- Policies to Maintain or Expand Market Competition
- When Competition is Not Preferred
  - Monopoly Regulation
  - Government Provision

Policies Dealing with External Effects
- Reducing External Costs
- External Benefits
- Public Goods

Government Finance
- Government Uses of Funds
- Government Sources of Funds
- Government Budget Deficits

PART C: DISTRIBUTIONAL EQUITY: THE SUCCESS AND FAILURE OF MARKETS

What Is Distributional Equity?

Fair Systems of Distribution
- Equal Opportunity
- Income in Accordance with Contribution

Fair Distributional Outcomes
- Equality of Outcomes
- Large Income Differences Should Not Exist
- Minimum Standard Criterion

Requirements for Achieving Equity
Tradeoffs Between Efficiency and Equity
Applying Equity Criteria

Who's Rich? Who's Poor?

What Are We Trying to Measure?
Measuring the Income Distribution
Modified Income Distribution Data
- The Income Concept
- Family Size
- Cost-of-Living Adjustments
- The Time Period of Measurement

The Question of Poverty
- Defining Poverty
- Poverty in the United States

The Distribution of Wealth
The Effects of Growth on the Income Distribution

Market-Determined Distribution

The Supply of Labor
The Demand for Labor
Labor Market Interactions
- Analysis of a Single Market
- Wage Elasticities of Labor Market Demand and Supply
- Adjustments Among Several Labor Markets
- The Tendency for Market Wages to Equalize
- Inflation and Wage Adjustments

Barriers to Labor Market Adjustments
- Barriers That Operate Through the Demand Side
- Barriers That Operate Through the Supply Side
- Barriers That Interfere With Labor Markets

Growth, Investment, and the Long-Term Trend of Wages

What Can Society Do About Income Differences?

- Before the Market: Root Causes
  - Low Productivity
  - Education and Training
- Problems Within Labor Markets
  - Discrimination
  - Market Power
- After the Market
  - Taxation
    - Income Taxes
    - Other Taxes on Flows
    - Taxes on Stocks
  - Transfers
- Efficiency Effects of Equity-Seeking Policies
- Equity Aspects of Policy-Making

PART D: AGGREGATE EFFICIENCY IN THE MARKET ECONOMY

The Meaning and Measurement of Aggregate Efficiency

- What is Aggregate Efficiency?
- Aggregate Efficiency and Economic Growth
- The Costs of Aggregate Inefficiency
  - Economic Loss; Personal Costs; Potential GNP; Problems with Our Data
- Measuring the Degree of Aggregate Inefficiency
  - Capacity Utilization Versus the Employment Rate
  - Unemployment Rates
  - The Meaning of "Full" Employment
- Which Groups Suffer the Most Unemployment?
- The Rising Unemployment Rate
  - Structural Changes
  - Job Search and Mismatch: Two Explanations
  - Future Prospects
- Policies for Frictional and Structural Unemployment
  - A Measurement Dilemma
  - What of Unemployment in Excess of the Natural Rate?

An Aggregate Model of the Economy

- The Circular Flow -- Once Again
  - Leakages from the Flow
  - Injections into the Flow
- Flow Adjustments and Aggregate Equilibrium
- The Investment Multiplier
- Business Cycles
- Keynesian Policy
- Problems With Keynesian Economics
  - Economic Growth Effects
  - Fiscal Policy as Political Policy
  - Excessive Aggregate Demand

The Aggregate Role of Money

- What Is Money?
- Money and Economic Growth
- The Supply of Money
  - The Banking System; The Creation of Money; Policy Tools of the Fed

The Money Market
The Demand for Money
Money Market Equilibrium and Adjustments
Problems with Monetary Policy
Problems of a Technical Nature
Problems of a Fundamental Nature

Inflation and Aggregate Efficiency

Defining and Measuring Inflation
The Consumer Price Index (CPI)
The CPI is Not a Cost-Of-Living Index
The Uses of CPI
Prices Throughout History
The (Mostly Harmful) Effects of Inflation
Growth Effects
Allocative Efficiency Effects
Distributional Equity Effects
Aggregate Efficiency Effects
The Causes of Inflation
Demand-Side Inflation
Supply-Side Inflation
Monetary Inflation
The Role of Expectations

Policies to Achieve Aggregate Efficiency without Inflation

Explaining Stagflation
The Political Basis for Inflation
Supply Side Disincentives
Unattainable Employment Objectives
Supply Shocks
Economic Power
Theory and Policy
The Question of Excessive Government Spending
The National Debt
A Constitutional Amendment to Balance the Budget?
Supply-Side Policies
Accelerate Capital Investment
Accelerate Investment in Human Capital
Improve Productivity
Efficiency and Equity Effects
An Appraisal of Aggregate Efficiency Policies
Theory in Perspective
The Revolution of 1981
Other Policy Issues

PART E: THE PSYCHOLOGY OF SCARCITY

The Third Option: Reduce Expectations

Reduce Expectations In Practice
What Can One Person Do?
Can a Whole Society Reduce Its Aggregate Desires?
The Motives Vary
The Desire for Self-Sufficiency
Dissatisfaction With A Mass-Produced Society

Religious and Moral Objections to Market Values
Concern Over the Ecology
Problems With Trying To Reduce Expectations
Methods For Reducing Expectations
Is Reducing Expectations Desirable?
Putting Material Prosperity Into Perspective
Taking Things for Granted
Human Work: Dignifying or Dehumanizing?
Are We On a Treadmill?
What Kind of Growth Do We Want?